

Peer Review Panel: A New Zealand Approach to Regulatory Compliance of Landfills

Mark Milke¹, Bruce Riddolls², Martin Pinkham³, and Richard Purdon⁴

ABSTRACT: New Zealand is increasingly using a Peer Review Panel (PRP) system for regulatory compliance of complex and contentious environmental infrastructure facilities, such as landfills. The PRP is a set of experts who serve as an advisor to the operator and the regulator, and are responsible to both parties for independent assessments. The PRP for the Kate Valley landfill facility is presented as a case study in the motivation for, and operation of, a PRP. The use of the PRP arises partly from the effects-based environmental legislation in New Zealand, which leads to a lack of standardization in construction/operation and unique permit conditions at each site. The PRP meets with operators on a regular basis, conducts site visits, receives relevant documentation, and prepares an annual report for regulatory authorities. The PRP is able to examine and discuss safety, financial, and operational issues with the operators while maintaining confidentiality. This allows for open discussions of these issues where they might impact on environmental performance. The PRP also assists operators by providing them with technical information and experience from outside the operator's business environment. The PRP is a valuable option for regulatory bodies and project proponents to consider when developing permits for any one-off, complex facility with potentially large environmental impacts, and with great public concern.

INTRODUCTION

An increasingly common part of regulatory compliance systems in New Zealand for large environmental infrastructure facilities, such as landfills, is the independent Peer Review Panel (PRP). This has developed because of drawbacks in the more common method of compliance assessment, which involves the consent (permit) holder (i.e., the operator) reporting monitoring results, and the regulator assessing these monitoring reports and supplementing them with on-site visits before deciding on whether compliance has occurred. The main drawbacks with this system are:

1. Regional and local government rarely employs the specialized technical

¹Department of Civil and Natural Resources Engineering, University of Canterbury, Private Bag 4800, Christchurch, New Zealand, mark.milke@canterbury.ac.nz

²Riddolls Consultants Ltd., PO Box 2854, Christchurch, New Zealand, Riddolls@clear.net.nz

³Canterbury Waste Services Ltd., PO Box 20162, Bishopdale, New Zealand, MartinP@cws.co.nz

⁴Environment Canterbury, PO Box 345, Christchurch, New Zealand, Richard.purdon@ecan.govt.nz

expertise needed to assess whether a facility is operating according to good practice.

2. An adversarial relationship tends to develop between the regulator and operator, which leads to extra work for both parties and extra effort at legal protection while not providing commensurate environmental benefit.
3. The operator and the regulator both can be concerned that they are not receiving unbiased, independent assessments of the relationship between operation and regulatory compliance
4. The opportunity for a more pro-active management of potential problems is reduced.

This report analyses the use of PRPs for landfills in New Zealand with particular reference to the new Kate Valley facility, considers the unique features of New Zealand's regulatory system, and suggests key points to consider.

NEW ZEALAND'S ENVIRONMENTAL LAW

New Zealand's key environmental law is the Resource Management Act, 1991 (RMA), which was designed to bring environmental legislation under one act. It replaced more than 20 statutes and 50 other laws related to the environment. The most extensive consultation in New Zealand's history was undertaken in its preparation and this is reflected in the legislation. At the time of enactment, the RMA was unique in that no other country had mechanisms for managing the quality of land, air and water under a single law (Ministry for the Environment, 1999). Such an approach has been adopted by other countries since.

The principle of the RMA is sustainable management of natural and physical resources for the reasonably foreseeable future. It is an enabling piece of legislation being narrative in nature rather than prescriptive. Decisions are made on a site-by-site basis, according to the sensitivity of the local environment. Any proposed use or development can proceed if there are no adverse environmental effects, or if those effects can be "avoided, remedied or mitigated". It may initially appear that if the technical challenges can be met, the process of obtaining consent would be straight forward. However, the emphasis given to consultation as part of the process of obtaining consent must also be taken into consideration. Consultation was supposed to provide for "compromises and trade-offs and the arrival of sound environmental outcomes" (Palmer, 1995). Such an extensive requirement for consultation was new.

A "resource consent" (permit) is necessary for a range of activities including land use and discharges to land, water and air. Any activity that is not permitted and not prohibited in the Territorial Authorities Plan must have the appropriate consent. An application for consent requires an Assessment of Effects on the Environment (AEE), which is similar to an Environmental Impact Assessment, and is prescribed in the

legislation (Fourth Schedule, RMA). The focus of the process is on the effects (actual or potential) on the environment, rather than the activities themselves. The definition of environment includes

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) all natural and physical resources; and
- (c) amenity values; and
- (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated above, or which are affected by those matters.

“Environment” therefore has a wider meaning than the natural environment and emphasizes the importance of people and communities.

Once the application and accompanying AEE are submitted, the appropriate local or regional council will audit it, and may notify it publicly. Once notified, any person or group may make a submission and participate in the entire process through to the Environment Court appeal stage.

A pre-hearing meeting may be held prior to the formal council hearing to try to clarify, mediate or facilitate a resolution on any matter or issue. A hearing is then held, often in front of independent commissioners, where applicant and submitters may present their case to the council. The council’s decision, as recommended by the Hearings Panel, may be appealed by either the submitter or applicant for final resolution by the Environment Court. Consents are usually granted with “conditions” attached, to ensure specific outcomes are met.

For large or complex projects it is becoming common for the decision to include a condition requiring the establishment of a Peer Review Panel.

THE PEER REVIEW PANEL SYSTEM

In addition to reducing the above difficulties, a peer review system must meet certain objectives of the regulator and operator. For the regulator, a peer review system must have low cost and a low demand on typically overstretched staff. In addition, there must be accountability by the peer reviewers without abrogation of the regulator’s ultimate responsibility for enforcing a permit. For the operator, a peer review system must help to ensure a fair, apolitical process of assessing compliance, it must be independent of the advice of other consultants, and also must protect commercial confidentiality.

There are currently a number of PRPs operating in New Zealand, with at least three related to landfills. The PRP for the Kate Valley Landfill in Canterbury (www.ccc.govt.nz/waste/katevalley) was established by the Environment Court as a

consent condition. It accepts roughly 300,000 tonnes of municipal solid waste each year to a valley landfill about 75 km from the largest generator of waste, the City of Christchurch. The permits for the landfill are to Transwaste Canterbury Ltd, which is a joint-venture company created for the project that is 50% owned by the five participating local governments, and 50% owned by Transpacific Industries, a private waste management company. The private company has formed Canterbury Waste Services (CWS) Ltd., which is a separate entity that operates the landfill. The permits for the landfill require reporting to the regional governmental body, Environment Canterbury, on compliance issues related to water use, water quality, hazardous waste, air quality, and issues associated with impacts on the natural environment. The permits also require reporting to the local government body, Hurunui District Council, on issues associated with traffic, noise, lighting, odours, aesthetics, revegetation, and issues associated with local nuisances.

Existing and proposed landfill PRPs in New Zealand operate in slightly different ways. Some are required to have three permanent members, some are required to have members approved or at least commented on by community groups, some are required to report at six-monthly intervals, some are asked to recommend permit conditions that should be reviewed by governmental bodies, and some have non-technical members appointed.

The Kate Valley PRP has two permanent members with expertise in environmental engineering, and engineering geology respectively. They were nominated by the operator, but had to be approved in writing by the two local governmental authorities. The panel members can be dismissed by either the operator or the local government authorities. The fees for the peer review panel members are paid by the facility operator. The PRP can recommend hiring of additional members to advise on specific matters, and in this case, a specialist in dam construction has been added to the panel along with a specialist landfill geotechnical engineer.

The PRP must submit an annual report to the governmental bodies, and this is a public document. The regulatory approval of the landfill, in this case, specifies matters that must be assessed including monitoring, liner and cover construction, water control, compaction, and waste acceptance criteria. In addition, the PRP is asked to assess whether the design, construction, operation, and after-care are undertaken in accordance with good practice.

ACTIVITIES

The activities of the PRP have included the following:

- site visits (approximately four per year)
- review of documents related to design, construction, and operation

- review of operational procedures and documentation systems (eg, for waste acceptance)
- meetings with the operator to discuss design, construction, and operation issues (approximately four per year)
- review of monitoring data
- meet with community groups as requested to discuss or explain technical issues

Unlike meetings between regulatory bodies and operators, the meetings between the PRP and operators can have a much broader examination of operation of the facility. For example, the PRP and operators can discuss future plans for staging of the landfill, purchase of equipment, new operational practices, the cost of various options, the safety dimension of various options, and relate these all to the potential effects on meeting permit requirements. Because the PRP is paid by the operators, the diversion of discussion into these other matters does not create a need for separate billing or concern about a distraction from a 'main' objective. Because all matters are treated together, the potential for finding solutions that meet multiple objectives (safety, cost, permit compliance) increases.

CONCLUSIONS

The PRP is a valuable option for regulatory bodies and project proponents to consider when developing permits for any one-off, complex, large facility with potentially large environmental impacts, and with great public concern.

However, there are several features unique to New Zealand that could make the PRP option less workable in other countries. It has a decentralized system of environmental compliance. While there are national guidelines for landfills, these are not mandatory (except on gas emissions from landfills), and regulation is devolved to regional and local governments. The overarching environmental legislation (RMA) is effects-based legislation that focuses on a facility's site-specific effects to the environment. This situation arises partly because of the huge diversity in geography in a relatively small country, and the inefficiency that can result from standard solutions that might be applicable in a region with over 3 metres of rainfall a year, but not so where there is less than 0.5 metres. The result of this regulatory setting is that each facility is designed uniquely to limit local environmental impacts, and each facility has unique permit conditions to reflect the unique local environmental concerns. The uniqueness of each facility makes it that much more difficult to assess regulatory compliance in New Zealand. The current belief in New Zealand is that the benefits arising from site-specific assessment of environmental effects outweighs the costs in terms of more complex management of permit conditions.

The keys, in our view, to an effective PRP system are:

- *No conflict of interest:* The PRP members must not be paid consultants for the local government bodies, and must not be paid consultants to competitors for the facility's operators. In a relatively small country such as New Zealand, this can be difficult to achieve. It is important to reduce the potential for both parties to be suspicious of the motives of the PRP members. Without that trust, the PRP system can return to the legalistic, adversarial system that was meant to be reduced by the introduction of the PRP.
- *Confidentiality:* The PRP members must maintain confidentiality related to non-permit issues discussed. The ability to discuss these issues openly with the operators is a major advantage of the PRP system, and if the operators lose trust in the ability to maintain confidentiality, then the operators will see little distinction between dealings with the PRP and with governmental regulators. The result can be an extra layer of bureaucracy with no additional insight or pro-active management.
- *Accountability without responsibility:* The PRP members must be accountable for poor judgments. Any system that attempts to overly protect the PRP members or does not force the PRP to address key issues in a direct way will lead to eventual dissatisfaction by either the governmental regulators or the operators. On the other hand, it must be clear that the governmental regulators are still responsible for enforcing the permits. If the regulators see the PRP as a de-facto method of enforcing permits, then the operators and PRP members will become increasingly uneasy with the system.
- *Technical knowledge and experience.* Often the PRP members can bring additional technical expertise and experience that is not available from within the operator's organization or consultant team. The PRP can provide valuable review of documents before they are submitted to the local government authorities.

Although the PRP system has been successful to date on numerous New Zealand projects, there has not yet been a situation where a dispute has arisen between the operators and the regulators, and so one cannot be sure how a PRP system would perform in a crisis or contentious situation. As the use of the PRP system expands in New Zealand, and perhaps elsewhere, it will be valuable to examine critically its role in environmental regulatory compliance.

REFERENCES

- Ministry for the Environment, 1999. Your Guide to the Resource Management Act. Wellington: Ministry for the Environment.
- Palmer, G. 1995. The Making of the Resource Management Act, *in* Environment, The International Challenge: Essays by Geoffrey Palmer. Wellington: Victoria University Press.